

What is claimed is:

1. A linear guide apparatus for guiding a linear motion of a movable body along a guide rail on a fixed structure in a machine tool, comprising:

a rolling guide means including a rolling element for rolling on a surface of the guide rail; and

a brake means for enhancing the damping capacity of the rolling guide section,

wherein said brake means includes a pair of brake shoes, having a flexible structure, for sliding on the rolling element-rolling surface of the guide rail.

2. The linear guide apparatus according to claim 1, wherein an elastic member, biasing each brake shoe so that the brake shoe presses on the rolling element-rolling surface of the guide rail, is provided in the rear of the brake shoe.

3. The linear guide apparatus according to claim 2, wherein the brake shoe has a thin portion that allows a bend of the brake shoe by the force applied from the elastic member.

4. The linear guide apparatus according to any one of claims 1 to 3, wherein the sliding surface of each brake shoe is comprised of a resin sliding member.

5. The linear guide apparatus according to any one of claims 1 to 3, wherein the sliding surface of each brake shoe is comprised of an oil-free metal sliding member.

6. The linear guide apparatus according to claim 1, wherein the rolling element of the rolling guide means is a roller.

7. The linear guide apparatus according to claim 1, wherein the rolling element of the rolling guide means is

a ball.

8. The linear guide apparatus according to claim 2 or 3, wherein each brake shoe is fastened to the brake means by a plurality of adjustment bolts which adjust the pressing force of the brake shoe so that it acts evenly on the rolling element-rolling surface of the guide rail.